WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Tuesday, April 13, 2004

Hide?	Set Name	Query	Hit Count
	DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
☐	L40	((sens$4 or detect$4) near3 output near5 correspond$4 near5 (switch near2 position))	7
☐	L39	L37 and l25	2
☐	L38	L37.ab.	24
☐	L37	((identif$9 or detect$4 or sens$4 or determin$4) near2 switch near2 position) same (power adj switch)	98
☐	L36	L35 same (switch near2 position)	4
☐	L35	l29 same power$4	51
☐	L34	l29.clm.	59
☐	L33	l29.ab.	31
☐	L32	L28.ab. and l25	9
☐	L31	L28 and l25	36
☐	L30	L29 and l25	0
☐	L29	L28 same (first adj (contact or conductor or terminal)) same (second adj (contact or conductor or terminal))	163
☐	L28	L27 same (sens$4 or detect$4)	4896
☐	L27	(first adj switch) same (second adj switch)	24660
☐	L26	l5 and L25	6
☐	L25	l18 or l19 or l20 or l21 or l22 or l23 or L24	4215
☐	L24	307/140.ccls.	727
☐	L23	307/113.ccls.	414
☐	L22	307/112.ccls.	1314
☐	L21	340/644.ccls.	426
☐	L20	318/729.ccls.	324
☐	L19	713/340.ccls.	430
☐	L18	713/300.ccls.	811
	DB=USPT; PLUR=YES; OP=OR		
☐	L17	US-6230273-B1.did.	1
☐	L16	US-6230273-B1.did.	1
☐	L15	US-6355991-B1.did.	1
☐	L14	US-6355991-B1.did.	1

DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

☐	L13	l4.ti.	51

DB=USPT; PLUR=YES; OP=OR

☐	L12	US-4777479-A.did.	1
☐	L11	US-4777479-A.did.	1
☐	L10	US-5119212-A.did.	1
☐	L9	US-5119212-A.did.	1

DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

☐	L8	l5.ti.	6
☐	L7	l5.ab.	28
☐	L6	L5 same configur$9	2
☐	L5	L4 with (identif$9 or detect$4 or sens$4 or determin$4)	174
☐	L4	L2 with (switch near2 position)	1493
☐	L3	L2 same (switch near2 position)	2154
☐	L2	(power adj switch)	42372
☐	L1	(switch adj off) near2 delay$4	419

END OF SEARCH HISTORY

L36: Entry 1 of 4 File: USPT Apr 25, 2000

DOCUMENT-IDENTIFIER: US 6055359 A
TITLE: DC motor drive control with improved current sensing

Brief Summary Text (13):
The voltage across the RC parallel combination is provided to the current sensing input of the pulse width modulator, even when the first switch, namely, the power switch, is in the off position to very nearly replicate the armature motor current. Preferably, the pulse width modulator turns the first switch on and off in synchronism with the second switch, wherein the second switch is essentially a change transfer switch selectively coupling the RC combination across the current sensing resistor. Both the first switch and the second switch are preferably comprised of an FET, but also could comprise of a silicon controlled rectifier (SCR), or a transistor as desired. In the case of using FETs the source terminal comprises the second terminal of the first switch, and the drain comprises the first terminal to provide a common drain connection. A pulse width modulation control signal generates a variable PWM control signal that is coupled to the current sensing input of the pulse width modulator to control the speed of the motor. The voltage across the RC parallel combination is summed with the variable PWM control signal.

L36: Entry 3 of 4 File: USPT Aug 1, 1989

DOCUMENT-IDENTIFIER: US 4853608 A
TITLE: AC voltage regulator

CLAIMS:

11. An AC voltage regulator comprising means for connection to an input line, means for connection to an output line, a transformer arrangement for generating a voltage on said output line which can differ from a voltage on said input line, said transformer arrangement having a plurality of taps, relay switching means including a relay actuated polarity reversal switch arranged such that a voltage generated by said transformer arrangement at said output line can be in a first position of the switch added to and in a second position of the switch subtracted from a nominal voltage at said output line generated from said input line, a first relay actuated switch having a first terminal thereof connected to a first tap and a second terminal thereof connected to a second tap, a second relay actuated switch having a first terminal thereof connected to a third tap and a second terminal thereof connected to a fourth tap, a third relay actuated switch having a first terminal connected to said first switch and a second terminal connected to said second switch whereby selected actuation of said first, second and third switches is arranged to select one of said first, second, third and fourth taps, means for sensing a magnitude of a voltage and for actuating said relay actuated switches in dependence upon said sensed magnitude so as to tend to maintain said output voltage within predetermined limits while said input voltage varies, and means providing a circuit connection between said input and output lines by-passing said relay actuated switches and said transformer arrangement so as to maintain a current path and thus power to said output line during said switch actuation.

16. An AC voltage regulator comprising means for connection to an input line, means for connection to an output line, a transformer arrangement for generating a voltage on said output line which can differ from a voltage on said input line, said transformer arrangement having a plurality of taps, relay switching means including a relay actuated polarity reversal arrangement at said output line can be in a first position of the switch added to and in a second position of the switch subtracted from a nominal voltage at said output line generated from said input line, a first relay actuated switch having a first terminal thereof connected to a first tap and a second terminal thereof connected to a second tap, a second relay actuated switch having a first terminal thereof connected to a third tap and a second terminal thereof connected to a fourth tap, a third relay actuated switch having a first terminal connected to said first switch and a second terminal connected to said second switch whereby selected actuation of said first, second and third switches is arranged to select one of said first, second, third and fourth taps, means for sensing a magnitude of a voltage and for actuating said relay actuated switches in dependence upon said sensed magnitude so as to tend to maintain said output voltage within predetermined limits while said input voltage varies, and means providing a circuit connection between said input and output lines by-passing said relay actuated switches and said transformer arrangement so as to maintain a current path and thus power to said output line during said switch actuation wherein said sensing means comprises a plurality of op-amps each having a first input terminal and a second input terminal and each arranged to produce an output voltage when a voltage at said second input terminal exceeds the voltage at

said first input terminal, means for generating a reference voltage, means for connecting said reference voltage to said first input terminals in series, resistor means between each first input terminals and the next adjacent first input terminal such that the voltage at each first input terminal in turn is decreased relative to the next previous first input terminal, means for generating a voltage proportional to said voltage on said input line, means for applying said proportional voltage to each of said second input terminals and logic circuit means for actuating selected ones of said switching means in dependence upon the output voltages from said op-amps, and wherein said means for applying said reference voltage is arranged such that generation of an output voltage by each of said op-amps causes a reduction in voltage at the first terminal of the respective op-amp.

L33: Entry 7 of 31 File: USPT Sep 8, 1998

DOCUMENT-IDENTIFIER: US 5805058 A
TITLE: Control circuit for vehicular mounted passenger protecting devices

Abstract Text (1):
A passenger protecting device of a motor vehicle includes an acceleration sensor which issues an acceleration signal representative of the degree of a vehicle collision; a signal processing circuit which, by processing the acceleration signal, issues an ignition trigger signal when judging that the vehicle collision is critical; a DC power source for charging a plurality of back-up capacitors; a plurality of squibs each having first and second terminals, the first terminals of the squibs being connected to a common terminal and the second terminals of the squibs being connected to the back-up capacitors through respective connection lines; a first switch circuit having one terminal connected to the common terminal and the other terminal grounded; and a plurality of second switch circuits, each being disposed in each of the respective connection lines, each second switch circuit being turned ON when receiving the ignition trigger signal from the signal processing circuit. According to the invention, each of the second switch circuits comprises a current limiting means by which a current supplied from each of the back-up capacitors to the corresponding squib is limited.

L33: Entry 2 of 31 File: USPT Aug 21, 2001

DOCUMENT-IDENTIFIER: US 6278598 B1
TITLE: PC switch circuit with discharge circuitry

Abstract Text (1):
Provided is a relatively simple PC switch circuit which performs a function for removing the residual voltage with a high reliability. The switch circuit includes a first switch 101 having a first terminal connected to the first power source, a second terminal connected to the load component and a control terminal to which a first control signal for controlling the first switch is supplied; a second switch 103 having a first terminal connected to the control terminal of the first switch, a second terminal connected to the second power source and a control terminal to which a second control signal for controlling the second switch is supplied; and a reverse current preventing element 107 connected between the load component and the first terminal of the second switch. A fault condition of the second switch is easily detected, and a flow of a wasteful current from the second terminal of the first switch to the second power source is prevented. This circuit is ideally suited for use in personal computer technology.

L33: Entry 2 of 31 File: USPT Aug 21, 2001

DOCUMENT-IDENTIFIER: US 6278598 B1
TITLE: PC switch circuit with discharge circuitry

Abstract Text (1):
Provided is a relatively simple PC switch circuit which performs a function for removing the residual voltage with a high reliability. The switch circuit includes a first switch 101 having a first terminal connected to the first power source, a second terminal connected to the load component and a control terminal to which a first control signal for controlling the first switch is supplied; a second switch 103 having a first terminal connected to the control terminal of the first switch, a second terminal connected to the second power source and a control terminal to which a second control signal for controlling the second switch is supplied; and a reverse current preventing element 107 connected between the load component and the first terminal of the second switch. A fault condition of the second switch is easily detected, and a flow of a wasteful current from the second terminal of the first switch to the second power source is prevented. This circuit is ideally suited for use in personal computer technology.

L33: Entry 4 of 31 File: USPT Jun 26, 2001

DOCUMENT-IDENTIFIER: US 6252492 B1
TITLE: Condition-responsive electric switch mechanism

Abstract Text (1):
A condition-responsive electric switch mechanism for use in controlling a compressor of a refrigeration appliance. The switch mechanism includes first, second and third terminals, an actuator movable as a function of a detected condition and a bistable spring switch element electrically connected to the first terminal. The spring switch element includes a movable contact and is adapted for snap-acting movement between an open and a closed position. In the open position, the movable contact of the spring switch element is spaced apart from a fixed contact mounted on the second terminal. In the closed position, the movable contact engages the fixed contact to electrically connect the first and second terminals. The spring switch element also includes a toggle blade operable by engagement with the actuator for motion through a first switch point. At the first switch point, the spring switch element snaps between the open and closed positions. The toggle blade is operable by further engagement with the actuator for motion past the first switch point to a second switch point. At the second switch point, the toggle blade electrical connects the first and third terminals to enable an alarm.

L26: Entry 1 of 6 File: USPT Sep 5, 2000

DOCUMENT-IDENTIFIER: US 6115824 A
TITLE: Apparatus and a method for avoiding the accidental termination of computer power

Detailed Description Text (5):
The present invention avoids such accidental terminations, as shown in the first embodiment of the present invention illustrated in FIG. 1. First, in steps S101 through S105, the computer is turned on and a power management program is automatically activated. Then, during step S107, the power management program determines whether the power switch is on. This step is repeated until the program determines that the power switch is in the off position. After the program determines that the switch is in the off position, in step S109, the display device displays a power managing window or menu. In step S111, an operator selects one of the four available options in the control window or menu.

Detailed Description Text (8):
If an operator selects the "Suspend" button then the power managing program changes the mode of the central processing unit 1 to a sleep or hibernate mode in step S121. In step S123 the computer determines if it is time for a wake up signal and, if so, returns to step S107 and treats the power switch as if it was in the "on" position and, if not, returns to step S121.

Detailed Description Text (10):
After the computer booting process is completed, the computer system processes the BIOS instructions and determines the operational position of the power switch and whether it is in the "off" position during step S107. If during step S107, it is determined that a power switch is in the "off" position, the BIOS outputs a power-off signal to the power managing program. When the power managing program receives the power-off signal, the computer system displays the power managing window or menu shown in FIG. 3 during step S109. The power managing window or menu has four buttons, the "Cancel", "Reboot" or "Reset", "Suspend", and "Power-Off" buttons.

Detailed Description Text (14):
When the "Cancel" button is selected, the power managing program returns to step S107 to determine whether the power switch is turned to the "off" position. The power is not terminated and the power managing program repeats the above-described method. Before determining whether the power switch is again in the off position the power managing program waits to detect the switch in the on position. Alternatively, a mechanism can return the power switch to the on position after the "Cancel" button is selected.

Detailed Description Text (15):
A second embodiment of the present invention is illustrated by the method of FIG. 2. First, during steps S201 through S205, the computer system is turned on, booted up, and the power managing program is activated. Then, during step S207 the computer system determines whether the power switch is in the "on" position. If the power switch is in the "on" position then the power managing program continues to check the position of the power switch. After the switch is detected in the "off" position, in step S209, the computer system displays the power managing window or menu shown in FIG. 3.

Detailed Description Text (19):
The BIOS also detects the position of the power switch and whether the power switch is in the "off" position, during step S207. The computer continues to check the power switch until it is detected in the "off" position. Once the power switch is detected in the "off" position, the BIOS sends a power-off signal to the power managing program.

Current US Cross Reference Classification (1):
713/300

CLAIMS:

5. The process of claim 1, further comprised of said step of determining whether said power switch has been moved to said off position further comprised of first waiting for said power switch to be returned to an on position when said power switch has been detected in said off position at least once since said computer system was booted up.

15. The process of claim 9, further comprised of said step of determining whether said power switch has been moved to said off position further comprised of first waiting for said power switch to be returned to an on position when said power switch has been detected in said off position at least once since said computer system was booted up.

18. A computer system that avoids accidental termination of power, comprising:

a display device driven by a central processing unit running a power management program;

a power switch for said computer system, said power switch having an off position and an on position;

means for detecting one of said off position and said on position of said power switch;

a first power off signal generated by said central processing unit and sent to said power management program when said power switch is detected in said off position while said computer system is powered, said power management program causing a menu to be displayed on said display device when said first power off signal is received;

said menu containing a plurality of graphics including a first graphic representing a power off command, a second graphic representing a cancel command, a third graphic representing a reset command for rebooting said computer system and a fourth graphic representing a suspend command for changing an operational mode of said computer system to a suspend mode;

a timer controlled by said central processing unit started when said menu is displayed;

a second power off signal sent to a power controller for said computer system when any one of said first graphic is selected by a user and said timer reaches a predetermined period of time without said user selecting any one of said plurality of graphics, said power controller terminating power to said computer system when said second power off signal is received; and

a cancel signal sent to said power management program when said second graphic is selected by said user, said power management program removing said menu and continuing to monitor a position of said power switch when said second graphic is

selected.

21. A process for confirming a command to terminate power to a computer system, comprising the steps of:

determining whether a power switch has been moved to an off position while said computer system is powered, with said step of determining whether said power switch has been moved to said off position further comprised of first waiting for said power switch to be returned to an on position when said power switch has been detected in said off position at least once since said computer system was booted up;

displaying a menu for managing the power supplied to said computer system when said power switch is detected in said off position, said menu containing a plurality of buttons comprising a power-off button, and a cancel button;

starting a timer;

detecting a button of said plurality of buttons in said menu that is selected by a user, when said button is not selected by said user before said timer reaches a predetermined time proceeding when said timer has reached said predetermined time to said step for when said user selects said power-off button;

when said user selects said power-off button:

quitting any active program;

terminating the power to said computer system; and

returning to said step of determining whether said power switch has been moved to said off position; and

when said user selects said cancel button:

returning to said step of determining whether said power switch has been moved to said off position.

L26: Entry 4 of 6 File: USPT Jun 10, 1997

DOCUMENT-IDENTIFIER: US 5638540 A
TITLE: Portable computer/radio power management system

Detailed Description Text (25):
For example, any time microprocessor 22 detects through input line 60 that AC power source 34 is active and supplying power to module 20, microprocessor 22 will use AC power source 34 (instead of DC power source 32) to recharge battery 28, when necessary, and will take line 42 low, thereby disabling FET 36, so that DC power source 32 (which derives its power from the main battery of computer 12) is not drained needlessly. The only time DC power source 32 is used to recharge battery 28 is when the radio power switch is in the "on" position, microprocessor 22 detects through input line 44 that DC power source 32 is active supplying power to module 20, and microprocessor 22 detects through input line 60 that AC power source 34 is inactive (e.g., no power is being supplied to module 20 by AC power source 34).

Current US Original Classification (1):
713/300

First Hit Fwd Refs

End of Result Set

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L26: Entry 6 of 6 File: USPT Jul 11, 1995

DOCUMENT-IDENTIFIER: US 5432945 A
TITLE: Output control and protection device, in particular for programmable automatic controllers

Current US Original Classification (1):
713/340

CLAIMS:

1. Control and protection device for a DC output channel of a programmable automatic controller, said channel comprising first and second terminals connected therebetween by a switching circuit comprising an electric power switch controlled by a control unit through a control circuit (having a logic circuit) so as to allow a current to flow in said switching circuit, a protection circuit for protecting said switching circuit against overcurrents, said protection circuit having a terminal A on which is applied a detection voltage imaging said current and supplied by a detector means equipping said switching circuit, a comparator having a first input connected to said third terminal, a second input on which is applied a reference voltage and an output which is connected, via a filter having a filtering time to a resettable disabling circuit which applies to said control unit a disabling signal causing said control circuit to generate a control signal when an overcurrent is occurring and as a consequence, the detection voltage has a value which exceeds said reference voltage during a period exceeding said filtering time, said control signal causing said power switch to pass to a disabled state and said resettable disabling circuit further having a switching device which is connected to said first input of said comparator and which applies on said first input a forcing voltage so as to maintain said disabling signal applied to the control unit and to keep said power switch in said disabled position in response to said overcurrent.

First Hit

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L13: Entry 4 of 51 File: DWPI Aug 2, 2001

DERWENT-ACC-NO: 2001-466250
DERWENT-WEEK: 200151

TITLE: Power switch with bus bar connections, branch lines developed to reduce equipment costs without introducing limitations, esp. w.r.t. switch-on proof earthing - has two-position switches connected to main contact so earth potential of each earthing contact can be transferred via main contact

INVENTOR: KAMPF, M

PATENT-ASSIGNEE:

ASSIGNEE	CODE
SIEMENS AG	SIEI

PRIORITY-DATA: 2000DE-1004739 (January 28, 2000)

Search Selected | Search ALL | Clear

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	DE 10004739 A1	August 2, 2001		004	H02B013/035

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 10004739A1	January 28, 2000	2000DE-1004739	

INT-CL (IPC): H01 H 31/00; H02 B 13/035

ABSTRACTED-PUB-NO: DE 10004739A
BASIC-ABSTRACT:

The power switch has three-position switches implemented as two-position switches (ZSS), each with a movable contact part (BKT) and each implemented with non switch-on proof earthing contacts.

The two-position switches are connected to a main contact (HKO) so that the earth potential (EPO) of each earthing contact can be transferred via the main contact.

USE - Power switch with bus bar connections and branch lines.

ADVANTAGE - Developed to considerably reduce equipment costs without introducing limitations, esp. with regard to switch-on proof earthing.

CHOSEN-DRAWING: Dwg.1/2

TITLE-TERMS: POWER SWITCH BUS BAR CONNECT BRANCH LINE DEVELOP REDUCE EQUIPMENT COST INTRODUCING LIMIT SWITCH PROOF EARTH TWO POSITION SWITCH CONNECT MAIN CONTACT SO EARTH POTENTIAL EARTH CONTACT CAN TRANSFER MAIN CONTACT

DERWENT-CLASS: X13 X16

EPI-CODES: X13-B01; X13-E03; X13-E03B; X16-E04;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N2001-345806

First Hit

End of Result Set

☐ Generate Collection | Print

L8: Entry 6 of 6 File: DWPI

DERWENT-ACC-NO: 1983-C8999K
DERWENT-WEEK: 198309

TITLE: Mode selector arrangement for detachable flash camera - has flash exposure controller effective power switch position detector and mounting position detector to indicate closure

INVENTOR: EONOMOTO, F

PATENT-ASSIGNEE:

ASSIGNEE	CODE
OLYMPUS OPTICAL CO LTD	OLYU

PRIORITY-DATA: 1981JP-0112015 (July 27, 1981)

Search Selected | Search ALL | Clear

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	GB 2103814 A			010	

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
GB 2103814A	June 30, 1982	1982GB-0018853	

INT-CL (IPC): G03B 15/05

ABSTRACTED-PUB-NO: GB 2103814A
BASIC-ABSTRACT:

The arrangement permits a selective switching between an EE photographing mode under natural light and a flash photographing mode. A mode switching member normally establishes an EE photographing mode in the camera and switches the operating mode of the camera to a flash photographing mode in response to external operation. A position-detector senses the displacement of the mode-switching member to a position in which it establishes the flash photographing mode.

A mounting-detecting device senses the fact that an electronic flash unit has been mounted on the camera. An electrical shutter control circuit presets an exposure period to be used during flash photography only when the both detectors have determined the position and the mounting respectively. (10pp)

The arrangement permits a selective switching between an EE photographing mode

under natural light and a flash photographing mode. A mode switching member normally establishes an EE photographing mode in the camera and switches the operating mode of the camera to a flash photographing mode in response to external operation. A position-detector senses the displacement of the mode-switching member to a position in which it establishes the flash photographing mode.

A mounting-detecting device senses the fact that an electronic flash unit has been mounted on the camera. An electrical shutter control circuit presets an exposure period to be used during flash photography only when the both detectors have determined the position and the mounting respectively. (10pp)
ABSTRACTED-PUB-NO:

GB 2103814A
EQUIVALENT-ABSTRACTS:

TITLE-TERMS: MODE SELECT ARRANGE DETACH FLASH CAMERA FLASH EXPOSE CONTROL EFFECT POWER SWITCH POSITION DETECT MOUNT POSITION DETECT INDICATE CLOSURE

DERWENT-CLASS: P82 S06

EPI-CODES: S06-B02B; S06-B02C; S06-B03A;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N1983-037720

First Hit

☐ Generate Collection | Print

L8: Entry 1 of 6 File: DWPI Nov 17, 1998

DERWENT-ACC-NO: 1999-056087
DERWENT-WEEK: 199906

TITLE: Position detector of power switch e.g. gas insulated switch - includes serially connected coils passing through sleeve of detector body attached to power switch, so that position of power switch is detected based on variation in induction coupling between coils

PATENT-ASSIGNEE:

ASSIGNEE	CODE
TOSHIBA KK	TOKE

PRIORITY-DATA: 1997JP-0118947 (May 9, 1997)

Search Selected | Search ALL | Clear

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	JP 10308144 A	November 17, 1998		010	H01H033/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 10308144A	May 9, 1997	1997JP-0118947	

INT-CL (IPC): H01 H 9/16; H01 H 33/00; H02 B 13/065

ABSTRACTED-PUB-NO: JP 10308144A
BASIC-ABSTRACT:

The detector includes a cylindrical detection sensor (3) which is passed in a non-contact manner through magnetic cylindrical sleeve of a detected body (1) attached to power switch. The detection sensor includes two coils which are arranged serially along longitudinal direction.

When power switch is opened or closed, the detected body moves accordingly, which varies inductor coupling between the coils in the detection sensor. The variation in the inductive coupling is detected as a signal indicating the position of the power switch.

USE - In switch yard of electric power system.

ADVANTAGE - Prevents damage to power switch since detection is performed in non-contact manner. Measures and monitors accurately stroke measurement of power switch using simple components.

CHOSEN-DRAWING: Dwg.1/13

TITLE-TERMS: POSITION DETECT POWER SWITCH GAS INSULATE SWITCH SERIAL CONNECT COIL PASS THROUGH SLEEVE DETECT BODY ATTACH POWER SWITCH SO POSITION POWER SWITCH DETECT BASED VARIATION INDUCTION COUPLE COIL

DERWENT-CLASS: X13

EPI-CODES: X13-B09; X13-E03B;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N1999-042613

First Hit Fwd Refs

Generate Collection Print

L6: Entry 1 of 2 File: USPT Mar 25, 2003

DOCUMENT-IDENTIFIER: US 6536408 B1
** See image for Certificate of Correction **
TITLE: Engine brake control integration with vehicle service brakes

CLAIMS:

13. The system as defined by claim 12, wherein the plurality of inputs and outputs of the computer comprises at least first, second, third, fourth, fifth, sixth, seventh and eighth computer inputs and at least first and second computer outputs, the first computer input being electrically connected to the throttle position sensor, the second computer input being electrically connected to the clutch pedal position switch, the third computer input being electrically connected to the engine speed sensor, the fourth computer input being electrically connected to the output terminal of the low-power switch, the fifth computer input being electrically connected to the output terminal of the medium-power switch, the sixth computer input being electrically connected to the first and second low-power slide contacts, the seventh computer input being connected to the medium-power slide contact, the eighth computer input being electrically connected to the output terminal of the brake pedal position slide switch, the output signals responsively generated by the computer brake control logic being communicated to the first and second engine computer outputs, the input configuration and logic for the engine computer thereby providing for interruption-free low engine brake power throughout the travel of the brake pedal.

First Hit Fwd Refs

End of Result Set

Generate Collection Print

L6: Entry 2 of 2 File: USPT Nov 9, 1993

DOCUMENT-IDENTIFIER: US 5260689 A
TITLE: Dual-mode ski alarm apparatus

Detailed Description Text (83):
Defined in detail, the present invention is a dual-mode alarm apparatus for a ski having a generally flat narrow upper surface mounted with a ski binding for receiving a skier's ski boot, the dual-mode alarm apparatus comprising: (a) an independent and unitary housing having an aerodynamic exterior configuration; (b) said housing retaining an auditory alarm means, a visual alarm means, a power means, a power switch, a tether switch and a motion sensor, all electrically connected with an electronic alarm circuitry contained within said housing; (c) said auditory alarm means being able to produce an audible alarm which can be heard from outside of said housing; (d) said visual alarm means being able to produce a visible alarm which can be seen from outside of said housing; (e) said power switch being switchable from outside of said housing by a key means, such that said alarm circuitry is electrically energized when said power switch is switched to an on position, and said alarm circuitry is electrically de-energized when said power switch is switched to an off position; (f) said tether switch having a tether aperture accessible from outside of said housing for accommodating a tether means, such that the insertion of the tether means causes said tether switch to be in a closed status and the removal of the tether means causes said tether switch to be in an open status; (g) means for mounting said housing onto said generally flat narrow upper surface of said ski at a location adjacent to said ski binding; (h) means for linking said tether means with said ski binding such that the separation of said skier's ski boot from said ski binding will cause said tether means to be removed from said tether aperture of said tether switch; (i) said alarm circuitry including a visual alarm driver for operating said visual alarm means such that when said power switch is switched to said on position, said visual alarm means will produce said visible alarm; (j) said alarm circuitry further including an initialization circuit and a flip-flop array for setting said alarm apparatus in one of two operating modes including a tether detect mode and a motion detect mode, such that when said tether switch is in said close status, switching said power switch to said on position will set said alarm apparatus in the tether detect mode, and when said tether switch is in said open status, switching said power switch to said on position will set said alarm apparatus in the motion detect mode; (k) said alarm circuitry further including a logic gate array connected to said flip-flop array and said tether switch and being operable in both said two operating modes; (l) said alarm circuitry further including an auditory alarm driver connected to said logic gate array for operating said auditory alarm means, such that said auditory alarm driver will cause said auditory alarm means to produce said audible alarm upon receiving a desired logic output from said logic gate array; (m) said logic gate array including logic gate means which will produce said desired logic output, when said alarm apparatus is in said tether detect mode and the status of said tether switch is changed from said closed status to said open status; (n) said alarm circuitry further including a counter means interconnected between said motion sensor and said flip-flop array for causing said flip-flop array to produce a desired flip-flop output which in turn will cause said logic gate array to produce said desired logic output, when said alarm apparatus is in said motion

detect mode and said motion sensor detects movement of said ski; (o) said flip-flop array being able to not produce said desired flip-flop output as said motion sensor detects movement of said ski, when said alarm apparatus is in said tether detect mode; and (p) said logic gate array being able to not produce said desired logic output as said tether means is removed from said tether aperture of said tether switch, when said alarm apparatus is in said motion detect mode; (q) whereby when said skier is going to use said ski for skiing, said skier can first insert said tether means into said tether aperture of said tether switch and then turn said power switch to said on position to set said alarm apparatus in said tether detect mode, so that said audible alarm will be produced upon the separation of said ski binding and said skier's ski boot for assisting said skier to locate said ski, and when said skier is going to leave said ski unattended, said skier can first remove said tether means from said tether aperture of said tether switch and then turn said power switch to said on position to set said alarm apparatus in said motion detect mode, so that said audible alarm will be produced upon the unwanted movement of said ski for alerting said skier to guard said ski.

Detailed Description Text (84):
Defined broadly, the present invention is a dual-mode alarm apparatus for a snow-sports equipment having a generally flat upper surface for receiving a user's snow-sports boot, the dual-mode alarm apparatus comprising, (a) an independent housing having an aerodynamic exterior configuration; (b) said housing retaining an auditory alarm means, a visual alarm means, a power means, a power switch, a tether switch and a motion sensor, all electrically connected with an electronic alarm circuitry contained within said housing; (c) said auditory alarm means being able to produce an audible alarm which can be heard from outside of said housing; (d) said visual alarm means being able to produce a visible alarm which can be seen from outside of said housing; (e) said power switch being switchable from outside of said housing, such that said alarm circuitry is electrically energized when said power switch is switched to an on position, and said alarm circuitry is electrically de-energized when said power switch is switched to an off position; (f) said tether switch being able to be triggered between a closed status and an open status; (g) means for mounting said housing onto said generally flat upper surface of said snow-sports equipment; (h) means for linking said tether switch with said user's snow-sports boots such that the separation of said skier's ski boot from said snow-sports equipment will cause said tether switch to change from said closed status to said open status; (i) said alarm circuitry including a visual alarm driver for operating said visual alarm means such that when said power switch is switched to said on position, said visual alarm means will produce said visible alarm; (j) said alarm circuitry further including an initialization circuit and a flip-flop array for setting said alarm apparatus in one of two operating modes including a tether detect mode and a motion detect mode, such that when said tether switch is in said closed status, switching said power switch to said on position will set said alarm apparatus in the tether detect mode, and when said tether switch is in said open status, switching said power switch to said on position will set said alarm apparatus in the motion detect mode; (k) said alarm circuitry further including a logic gate array connected to said flip-flop array and said tether switch and being operable in both said two operating modes; (l) said alarm circuitry further including an auditory alarm driver connected to said logic gate array for operating said auditory alarm means, such that said auditory alarm driver will cause said auditory alarm means to produce said audible alarm upon receiving a desired logic output from said logic gate array; (m) said logic gate array being able to produce said desired logic output when said alarm apparatus is in said tether detect mode and the status of said tether switch is changed from said closed status to said open status; (n) said alarm circuitry further including a counter means interconnected between said motion sensor and said flip-flop array for causing said flip-flop array to produce a desired flip-flop output which in turn will cause said logic gate array to produce said desired logic output, when said alarm apparatus is in said motion detect mode and said motion sensor detects movement of said snow-sports equipment; (o) said flip-flop array will not produce

said desired flip-flop output as said motion sensor detects movement of said snow-sports equipment, when said alarm apparatus is in said tether detect mode; and (p) said logic gate array will not produce said desired flip-flop output as said tether switch is changed to said open status, when said alarm apparatus is in said motion detect mode; (q) whereby when said user is going to use said snow-sports equipment, said user can first set said tether switch to said closed status and then turn said power switch to said on position to set said alarm apparatus in said tether detect mode, so that said audible alarm will be produced upon the separation of said user's snow-sports boot and said snow-sports equipment for assisting said user to locate said snow-sports equipment, and when said user is going to leave said snow-sports equipment unattended, said user can first set said tether switch to said open status and then turn said power switch to said on position to set said alarm apparatus in said motion detect mode, so that said audible alarm will be produced upon the unwanted movement of said snow-sports equipment for alerting said user to guard said snow-sports equipment.

L39: Entry 1 of 2 File: USPT Sep 5, 2000

DOCUMENT-IDENTIFIER: US 6115824 A
TITLE: Apparatus and a method for avoiding the accidental termination of computer power

Detailed Description Text (5):
The present invention avoids such accidental terminations, as shown in the first embodiment of the present invention illustrated in FIG. 1. First, in steps S101 through S105, the computer is turned on and a power management program is automatically activated. Then, during step S107, the power management program determines whether the power switch is on. This step is repeated until the program determines that the power switch is in the off position. After the program determines that the switch is in the off position, in step S109, the display device displays a power managing window or menu. In step S111, an operator selects one of the four available options in the control window or menu.

Detailed Description Text (10):
After the computer booting process is completed, the computer system processes the BIOS instructions and determines the operational position of the power switch and whether it is in the "off" position during step S107. If during step S107, it is determined that a power switch is in the "off" position, the BIOS outputs a power-off signal to the power managing program. When the power managing program receives the power-off signal, the computer system displays the power managing window or menu shown in FIG. 3 during step S109. The power managing window or menu has four buttons, the "Cancel", "Reboot" or "Reset", "Suspend", and "Power-Off" buttons.

Detailed Description Text (14):
When the "Cancel" button is selected, the power managing program returns to step S107 to determine whether the power switch is turned to the "off" position. The power is not terminated and the power managing program repeats the above-described method. Before determining whether the power switch is again in the off position the power managing program waits to detect the switch in the on position. Alternatively, a mechanism can return the power switch to the on position after the "Cancel" button is selected.

Detailed Description Text (15):
A second embodiment of the present invention is illustrated by the method of FIG. 2. First, during steps S201 through S205, the computer system is turned on, booted up, and the power managing program is activated. Then, during step S207 the computer system determines whether the power switch is in the "on" position. If the power switch is in the "on" position then the power managing program continues to check the position of the power switch. After the switch is detected in the "off" position, in step S209, the computer system displays the power managing window or menu shown in FIG. 3.

Detailed Description Text (19):
The BIOS also detects the position of the power switch and whether the power switch is in the "off" position, during step S207. The computer continues to check the power switch until it is detected in the "off" position. Once the power switch is detected in the "off" position, the BIOS sends a power-off signal to the power managing program.

Current US Cross Reference Classification (1):
713/300

CLAIMS:

1. A process for confirming a command to terminate power to a computer system, comprising the steps of:

determining whether a power switch has been moved to an off position while said computer system is powered;

displaying a menu for managing the power supplied to said computer system when said power switch is detected in said off position, said menu containing a plurality of buttons comprising a power-off button, a reboot button, a cancel button and a suspend button;

detecting a button in said menu that is selected by a user;

when said user selects said power-off button:

quitting any active program;

terminating the power to said computer system; and

returning to said step of determining whether said power switch has been moved to said off position;

when said user selects said cancel button:

returning to said step of determining whether said power switch has been moved to said off position;

when said user selects said suspend button:

changing an operational mode of said computer system to a suspend mode;

determining whether a wake-up signal has been generated;

when said wake-up signal is detected restoring said computer system to said operational mode existing prior to changing to said suspend mode; and

returning to said step of determining whether said power switch has been moved to said off position; and

when said user selects said reboot button:

quitting any active program;

rebooting said computer system; and

returning to said step of determining whether said power switch has been moved to said off position.

5. The process of claim 1, further comprised of said step of determining whether said power switch has been moved to said off position further comprised of first waiting for said power switch to be returned to an on position when said power switch has been detected in said off position at least once since said computer system was booted up.

9. A process for confirming a command to terminate power to a computer system, comprising the steps of:

determining whether a power switch has been moved to an off position while said computer system is powered;

displaying a menu for managing the power supplied to said computer system when said power switch is detected in said off position, said menu containing a plurality of buttons comprising a power-off button, a reset button, a suspend button and a cancel button, said reset button for rebooting said computer system and said suspend button for changing an operational mode of said computer system to a suspend mode;

starting a timer;

detecting a button of said plurality of buttons in said menu that is selected by a user, when said button is not selected by said user before said timer reaches a predetermined time proceeding when said timer has reached said predetermined time to said step for when said user selects said power-off button;

when said user selects said power-off button:

quitting any active program;

terminating the power to said computer system; and

returning to said step of determining whether said power switch has been moved to said off position; and

when said user selects said cancel button:

returning to said step of determining whether said power switch has been moved to said off position.

15. The process of claim 9, further comprised of said step of determining whether said power switch has been moved to said off position further comprised of first waiting for said power switch to be returned to an on position when said power switch has been detected in said off position at least once since said computer system was booted up.

18. A computer system that avoids accidental termination of power, comprising:

a display device driven by a central processing unit running a power management program;

a power switch for said computer system, said power switch having an off position and an on position;

means for detecting one of said off position and said on position of said power switch;

a first power off signal generated by said central processing unit and sent to said power management program when said power switch is detected in said off position while said computer system is powered, said power management program causing a menu to be displayed on said display device when said first power off signal is received;

said menu containing a plurality of graphics including a first graphic representing a power off command, a second graphic representing a cancel command, a third graphic representing a reset command for rebooting said computer system and a

fourth graphic representing a suspend command for changing an operational mode of said computer system to a suspend mode;

a timer controlled by said central processing unit started when said menu is displayed;

a second power off signal sent to a power controller for said computer system when any one of said first graphic is selected by a user and said timer reaches a predetermined period of time without said user selecting any one of said plurality of graphics, said power controller terminating power to said computer system when said second power off signal is received; and

a cancel signal sent to said power management program when said second graphic is selected by said user, said power management program removing said menu and continuing to monitor a position of said power switch when said second graphic is selected.

21. A process for confirming a command to terminate power to a computer system, comprising the steps of:

determining whether a power switch has been moved to an off position while said computer system is powered, with said step of determining whether said power switch has been moved to said off position further comprised of first waiting for said power switch to be returned to an on position when said power switch has been detected in said off position at least once since said computer system was booted up;

displaying a menu for managing the power supplied to said computer system when said power switch is detected in said off position, said menu containing a plurality of buttons comprising a power-off button, and a cancel button;

starting a timer;

detecting a button of said plurality of buttons in said menu that is selected by a user, when said button is not selected by said user before said timer reaches a predetermined time proceeding when said timer has reached said predetermined time to said step for when said user selects said power-off button;

when said user selects said power-off button:

quitting any active program;

terminating the power to said computer system; and

returning to said step of determining whether said power switch has been moved to said off position; and

when said user selects said cancel button:

returning to said step of determining whether said power switch has been moved to said off position.

22. A process for confirming a command to terminate power to a computer system, comprising the steps of:

determining whether a power switch has been moved to an off position while said computer system is powered;

displaying a menu for managing the power supplied to said computer system when said power switch is detected in said off position, said menu containing a plurality of

buttons comprising a power-off button, and a cancel button;

sending a power-off signal to a central processing unit for said computer system when said power switch is moved to said off position, said power-off signal not transmitted to a power controller for said computer system until said power-off button is selected and any active program is terminated, said power controller for said computer system terminating the power to said computer system when said power-off signal is received;

starting a timer;

detecting a button of said plurality of buttons in said menu that is selected by a user, when said button is not selected by said user before said timer reaches a predetermined time proceeding when said timer has reached said predetermined time to said step for when said user selects said power-off button;

when said user selects said power-off button:

quitting any active program;

terminating the power to said computer system; and

returning to said step of determining whether said power switch has been moved to said off position; and

when said user selects said cancel button:

returning to said step of determining whether said power switch has been moved to said off position.

23. A process for confirming a command to terminate power to a computer system, comprising the steps of:

determining whether a power switch has been moved to an off position while said computer system is powered;

displaying a menu for managing the power supplied to said computer system when said power switch is detected in said off position, said menu containing a plurality of buttons comprising a power-off button, and a cancel button;

starting a timer;

detecting a button of said plurality of buttons in said menu that is selected by a user, when said button is not selected by said user before said timer reaches a predetermined time proceeding when said timer has reached said predetermined time to said step for when said user selects said power-off button unless a suspend mode for said computer system is enabled, when said suspend mode is enabled changing an operational mode for said computer system to said suspend mode when a period of time reached by said timer equals said predetermined time;

when said user selects said power-off button:

quitting any active program;

terminating the power to said computer system; and

returning to said step of determining whether said power switch has been moved to said off position; and

when said user selects said cancel button:

First Hit Fwd Refs

End of Result Set

Generate Collection Print

L39: Entry 2 of 2 File: USPT Oct 11, 1988

DOCUMENT-IDENTIFIER: US 4777479 A
TITLE: Switch position indicator

Abstract Text (1):
A remote indicator for displaying the position of a power control switch whether or not power is applied to the switch. An auxiliary DC power supply provides a reference potential to a plurality of voltage dividers. One voltage divider provides a first reference potential to a comparator. A second voltage divider and the reference power supply are connected through the power control switch so that a second reference potential is applied to the comparator when the power switch is closed. Differences of the two reference potentials corresponding to the open and closed switch positions are sensed by the comparator and used to activate an indicator accordingly.

Brief Summary Text (5):
An auxiliary dc power supply provides a reference potential to a plurality of voltage dividers. One voltage divider is so constructed and arranged as to provide a first reference potential to a detector in the form of a comparator. A second voltage divider and the reference power supply are connected through the power control switch so that a second reference potential is applied to the detector when the power switch is closed. Differences of the two reference potentials corresponding to the open and closed switch positions are sensed by the detector and used to activate an indicator accordingly.

Current US Original Classification (1):
340/644

L40: Entry 1 of 7 File: USPT Nov 12, 2002

DOCUMENT-IDENTIFIER: US 6479908 B1
TITLE: Apparatus and method for sensing positions of an ignition switch

Detailed Description Text (4):
Ignition switch sensor 10 provides three outputs indicated as A, B and C that correspond to the ignition switch position and/or status. Of course, it is contemplated that sensor 10 can be configured to have a lesser or greater amount of outputs. As indicated in FIG. 1, output A provides an off/run/crank status of the ignition switch. Output B relates to an accessory position and output C relates to a run/crank position.

L40: Entry 2 of 7 File: USPT Oct 31, 1995

DOCUMENT-IDENTIFIER: US 5462125 A
TITLE: Automatic tip angle control

CLAIMS:

12. On an off-highway vehicle, an automatic tilt system, comprising:

an implement;.

an implement adjustment handle;

a first position sensor associated with said implement adjustment handle;

a switch associated with said implement adjustment handle;

a tilt actuator connected to said implement;

a second position sensor associated with said tilt actuator;

an electronic control connected to said first position sensor, said switch and said second position sensor, said electronic control responsively producing a command signal;

a supply of pressurized hydraulic fluid;

a tilt actuator valve adapted to receive the command signal from the electronic control and responsively control the flow of pressurized hydraulic fluid flow from said supply to the tilt actuator;

memory means for storing a value corresponding to a pre-set implement tilt angle;

wherein said switch includes a plurality of switch positions, each switch position corresponding to a pre-set implement tilt angle;. and

wherein the stored value corresponds to an output of said second position sensor immediately before a change in a switch position of said switch.

16. An automatic tilt system according to claim 15, wherein the stored value corresponds to an output of said second position sensor immediately before a change in a switch position of said switch.

L40: Entry 3 of 7 File: USPT Jun 1, 1993

DOCUMENT-IDENTIFIER: US 5216623 A
**** See image for Certificate of Correction ****
TITLE: System and method for monitoring and analyzing energy characteristics

Detailed Description Text (10):
Each of the input connectors 46 of the controller 14 has an associated input conditioning circuit 16 as depicted in FIG. 2A. Each of the input connectors 46 also has an associated input selector switch 48 mounted on a front panel 47 of the controller housing 49 adjacent to its associated input connector. As shown in FIG. 2B, each selector switch 48 has a moveable member 50 that may be set to one of a number of positions each of which represent a different sensor output type as described above. More particularly, the first position of the selector switch 48 corresponds to an analog sensor output that varies between 0 and 5 V. When the member 50 is moved to the first position of the selector switch 48, a switch 61 shown in FIG. 2A is closed. The second position of the selector switch 48 corresponds to an analog sensor output that varies between 4 and 20 mA. When the member 50 of the selector switch 48 is moved to the second position, a switch 62 is closed. The third position of the selector switch 48 corresponds to a digital data sensor output and when the member 50 is moved to the third position, a switch 63 is closed. The fourth position of the selector switch 48 corresponds to an analog sensor output that varies between 0 and 10 V and when the member 50 is moved to the fourth position, a switch 64 is closed. In the fifth position of the selector switch 48, a 0-100 mV sensor output is indicted with a switch 65 being closed.